

## HARDSHIP FINANCIAL ASSISTANCE CALCULATION CLEAN WATER FUND PROGRAM

(1) Municipality's 2000 Median Household Income =	\$	From 2000 Census
(2) Increase In County's Per Capita Income =	%	See MEDIAN HOUSEHOLD INCOME document
(3) Line (1) times [1 + Line (2)] = *Example below	\$	(MHI) Adjusted MHI
(4) Number Of Residential Users (Households) =		(N) Individual housing units
(5) Total Project Costs =	\$	Engineer's most recent estimate
(6) Ineligible Project Costs =	\$	e.g. laterals or hook-up fees
(7) Grants From Other Sources =	\$	e.g. Rural Development or CDBG
(8) Line (5) minus Line (6) minus Line (7) =	\$	Costs Eligible for CWFP Funding
(9) Parallel Cost Percentage or PCP =	%	
(10) Line (8) times [1 - Line (9)] = **Example below	\$	Industry/Growth Market Costs
(11) Other Market Costs =	\$	
(12) Line (10) plus Line (11) =	\$	Total Market Rate Costs
(13) Line (12) @ 4.300% for 20 years = ***See below for steps to follow on calculator	\$	(M) Annual Market Rate Payment
(14) Line (8) minus Line (12) =	\$	(P) Eligible for Below Market Interest Rate
(15) Line (14) @ 2.365% or 3.010% for 20 years = ****See below for steps to follow on calculator	\$	(AT) Annual Below-Market Rate Payment
(16) Estimated Annual Operation, Maintenance & Replacement Costs =	\$	(O)
(17) Residential Flow in Plans & Specs =		
(18) Total Flow in Plans & Specs =		
(19) Line (17) divided by Line (18) =	%	(R) Residential Percentage
(20) Outstanding P+I On Old Wastewater Debt =	\$	Not interim financing for this project
(21) Debt > 10 Years For Ineligibles =	\$	
(22) Line (20) plus Line (21) =	\$	Total Prior Wastewater Debt
(23) Line 22 divided by 20 years = (or by number of years remaining on debt if greater than 20 years).	\$	(W) Annual Prior Debt

\*For example, if the MHI is \$20,000 and the increase is 35.5%, the equation is  $20,000 \times 1.355 = \$27,100$ .

\*\*For example, if the eligible costs are \$100,000 and the PCP is 99%, the equation is  $100,000 \times (1 - 0.99) = \$1,000$ .

\*\*\*To determine (M), Annual Market Rate Payment, follow these steps on a financial calculator (HP12C or similar): Put in amount from Line 12, press PV, type 4.3, press i, type 20, press n, then press PMT, then CHS.

\*\*\*\*To determine (AT), Annual Below-Market Rate Payment, follow these steps on a financial calculator: Put in amount from Line 14, press PV, type 2.365 or 3.010, press i, type 20, press n, then press PMT, then CHS.



### Equation for Determining Eligibility

$$S = \frac{(AT + M + O + W) * R}{(MHI) * (N)}, \text{ where}$$

- S is the residential wastewater treatment charges as a percent of MHI  
AT is the annual CWFP below-market interest rate payment (Line 15, page 1)  
M is the annual CWFP market rate payment (Line 13 above)  
O is the annual operation, maintenance, and replacement costs (Line 16, page 1)  
W is the annual prior debt and debt for > 10 years for ineligible (Line 23, page 1)  
R is the residential percentage (Line 19, page 1)  
MHI is the adjusted median household income (Line 3, page 1)  
N is the number of residential users (Line 4, page 1)

**Step 1.** Line 15 \_\_\_\_\_ + Line 13 \_\_\_\_\_ + Line 16 \_\_\_\_\_  
+ Line 23 \_\_\_\_\_ = \_\_\_\_\_ Answer to Step 1

**Step 2.** Answer to Step 1 \_\_\_\_\_ X Line 19 \_\_\_\_\_ = \_\_\_\_\_  
\_\_\_\_\_ Answer to Step 2

**Step 3.** Line 3 \_\_\_\_\_ X Line 4 \_\_\_\_\_ = \_\_\_\_\_ Answer to Step 3

**Step 4.** Answer to Step 2 \_\_\_\_\_ / Answer to Step 3 \_\_\_\_\_ = \_\_\_\_\_  
\_\_\_\_\_ S

If S is greater than 2% (.02), the municipality meets the second criterion for hardship financial assistance eligibility. Proceed to the calculation of type and amount of assistance.

If S is 2% (.02) or less, the municipality does not meet the second criterion for hardship financial assistance eligibility but may request a CWFP loan at the regular below-market interest rate.



**Equation for Determining Type of Assistance and Amount**

$$(MHI)(N)(.02) = A$$

$$A / R = B$$

$$B - O - W - M = C$$

$$P / 20 = D$$

$$D - C = H$$

(MHI, Line 3 of Inputs) times (# of Res. Users, Line 4) times (2% or .02) =  
**Amount Residential Users Can Afford =** \$ \_\_\_\_\_ (A)

(Amount Residential Users Can Afford) divided by (Residential %, Line 19) =  
**Amount Entire Municipality Can Afford =** \$ \_\_\_\_\_ (B)

(Amount Municipality Can Afford) minus (O,M&R, Line 16) minus (Prior Debt, Line 23)  
minus (Annual Market Rate Cost, Line 13) =  
**Amt. Muni Can Afford to Pay Annually for CWFP Debt Service =** \$ \_\_\_\_\_ (C)

(Project Costs Eligible for Below Market Interest Rate, Line 14) divided by (20) =  
**Annual Debt Service at 0% =** \$ \_\_\_\_\_ (D)

(Annual Debt Service at 0%) minus (Amount Municipality Can Afford for CWFP Debt  
Service) = **Annual Grant Amount =** \$ \_\_\_\_\_ (H)

**IF (H) IS POSITIVE, THE FOLLOWING EQUATION APPLIES:**

(Annual Grant Amount) times (20) =  $H \times 20 =$   
**Total Grant Needed to Get to 2% of MHI =** \$ \_\_\_\_\_

70% of Costs Eligible for Below Market Rate Interest =  
Line 14 X .7 = **Maximum Grant =** \$ \_\_\_\_\_

Total Grant Needed to Get to 2% or Maximum Grant, whichever is less = **Total Grant =** \$ \_\_\_\_\_

Line 12 of Inputs section =  
**Total Market Rate Amount =** \$ \_\_\_\_\_

(Total Costs Eligible for CWFP Funding, Line 8) minus (Total Market Amount, Line 12)  
minus (Total Grant above) = **Total 0% Loan =** \$ \_\_\_\_\_

Total Grant + Total Market Rate Amount + Total 0% Loan = **Total Amount of  
Assistance Municipality is Eligible for** (should = Line 8 of inputs section) = \$ \_\_\_\_\_

**IF (H) IS NEGATIVE, PERFORM INTEREST RATE CALCULATION ON FINANCIAL CALCULATOR:**

- |  |               |
|--|---------------|
| a. Put in amount in (C) above  | -C = Payment  |
| b. Press ENTER   | P = Principal |
| c. Press CHS   | 20 = Term     |
| d. Press PMT   |               |
| e. Put in amount in Line 14 of inputs section (P)                    |               |
| f. Press PV  |               |
| g. Put in the number 20  |               |
| h. Press n   |               |
| i. Press i (Answer is your interest rate on below-market rate costs) |               |

